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| 10/771,547 | 02/05/2004 | Pablo Ameigeiras | 60279.00079 | 2804 |
| 32294 7590 05/29/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT DRIVE 14TH FLOOR VIENNA, VA 22182-6212 | | | | |
| EXAMINER | | | | |
| YUN, EUGENE | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2618 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/771,547

Applicant(s)

AMEIGEIRAS ET AL.

Examiner

EUGENE YUN

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevo et al. (US 6,813,256) and Wei et al. (US 6,987,780) and further in view of Yi et al. (US 7,356,146).

Referring to Claim 1, Nevo teaches a method comprising:

transmitting packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side (see col. 12, lines 5-15);

setting a retransmission parameter so that the packet data units are not retransmitted to said first base station when receiving status reports for sent packet data units from said receiving side (see col. 9, lines 8-22);

buffering transmitted packet data units in a retransmission buffer (see col. 12, lines 23-30);

receiving status reports for the sent packet data units from said receiving side (see col. 12, lines 47-61).

Nevo does not teach:

purging the packet data units from said retransmission buffer based on said received status reports; and

scheduling remaining packet data units in said retransmission buffer for transmission to said second base station, and transmitting said scheduled remaining packet data units to said second base station.

Wei teaches:

purging the packet data units from said retransmission buffer based on said received status reports (see col. 16, lines 39-45); and

scheduling remaining packet data units in said retransmission buffer for transmission to said second base station, and transmitting said scheduled remaining packet data units to said second base station (see col. 16, lines 31-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Wei to said device of Nevo in order to better prevent loss of data due to long periods between retransmissions.

The combination of Nevo and Wei does not teach the handover between base stations comprising transmitting packet data units for unacknowledged mode services and purging from said retransmission buffer the packet data units for which positive or negative status reports have not been received.

Yi teaches the handover between base stations comprising transmitting packet data units for unacknowledged mode services (see col. 14, lines 21-31) and purging from said retransmission buffer the packet data units (see col. 4, lines 31-36 noting that the packet data units are the RLC PDUs) for which positive or negative status reports have not been received (see col. 4, lines 44-50 noting that only RLC PDUs with a status report are retransmitted). Therefore, it would have been obvious to one of ordinary skill

in the art at the time the invention was made to provide the teachings of Yi to the modified device of Nevo and Wei in order to better minimize data discrepancies during handover.

Referring to Claim 5, Nevo teaches a system comprising:

a network node connected to at least a first base station and a second base station (see 36 in fig. 2);

user equipment connected to at least one of said first and second base stations (see col. 6, lines 32-40);

a transmitter configured to transmit packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side (see col. 12, lines 5-15);

a retransmission buffer configured to buffer transmitted packet data units (see col. 9, lines 8-22);

a setting device configured to set a retransmission parameter so that the packet data units are not retransmitted to said first base station when receiving status reports for sent packet data units from said receiving side (see col. 12, lines 23-30);

a receiver configured to receive the status reports for the sent packet data units from said receiving side (see col. 12, lines 47-61).

Nevo does not teach:

a management unit configured to purge the packet data units from said retransmission buffer based on said received status reports; and to schedule remaining

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packet data units in said retransmission buffer for transmission to said second base station,

wherein said transmitter is configured to transmit said scheduled remaining packet data units to said second base station.

Wei teaches:

a management unit configured to purge the packet data units from said retransmission buffer based on said received status reports (see col. 16, lines 39-45); and to schedule remaining packet data units in said retransmission buffer for transmission to said second base station,

wherein said transmitter is configured to transmit said scheduled remaining packet data units to said second base station (see col. 16, lines 31-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Wei to said device of Nevo in order to better prevent loss of data due to long periods between retransmissions.

The combination of Nevo and Wei does not teach the handover between base stations comprising transmitting packet data units for unacknowledged mode services and purging from said retransmission buffer the packet data units for which positive or negative status reports have not been received.

Yi teaches the handover between base stations comprising transmitting packet data units for unacknowledged mode services (see col. 14, lines 21-31) and purging from said retransmission buffer the packet data units (see col. 4, lines 31-36 noting that the packet data units are the RLC PDUs) for which positive or negative status reports

have not been received (see col. 4, lines 44-50 noting that only RLC PDUs with a status report are retransmitted). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Yi to the modified device of Nevo and Wei in order to better minimize data discrepancies during handover.

Referring to Claim 9, Nevo teaches an apparatus comprising:

a transmitter configured to transmit packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side (see col. 12, lines 5-15);

a retransmission buffer configured to buffer transmitted packet data units (see col. 9, lines 8-22);

a setting device configured to set a retransmission parameter so that the packet data units are not retransmitted to said first base station when receiving status reports for sent packet data units from said receiving side (see col. 12, lines 23-30);

a receiver configured to receive the status reports for the sent packet data units from said receiving side (see col. 12, lines 47-61).

Nevo does not teach:

a management unit configured to purge the packet data units from said retransmission buffer based on said received status reports; and to schedule remaining packet data units in said retransmission buffer for transmission to said second base station,

wherein said transmitter is configured to transmit said scheduled remaining packet data units to said second base station.

Wei teaches:

a management unit configured to purge the packet data units from said retransmission buffer based on said received status reports (see col. 16, lines 39-45); and to schedule remaining packet data units in said retransmission buffer for transmission to said second base station,

wherein said transmitter is configured to transmit said scheduled remaining packet data units to said second base station (see col. 16, lines 31-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Wei to said device of Nevo in order to better prevent loss of data due to long periods between retransmissions.

The combination of Nevo and Wei does not teach the handover between base stations comprising transmitting packet data units for unacknowledged mode services and purging from said retransmission buffer the packet data units for which positive or negative status reports have not been received.

Yi teaches the handover between base stations comprising transmitting packet data units for unacknowledged mode services (see col. 14, lines 21-31) and purging from said retransmission buffer the packet data units (see col. 4, lines 31-36 noting that the packet data units are the RLC PDUs) for which positive or negative status reports have not been received (see col. 4, lines 44-50 noting that only RLC PDUs with a status report are retransmitted). Therefore, it would have been obvious to one of ordinary skill

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in the art at the time the invention was made to provide the teachings of Yi to the modified device of Nevo and Wei in order to better minimize data discrepancies during handover.

Referring to Claim 13, Nevo teaches an apparatus comprising:

Transmitting means for transmitting packet data units in an acknowledged mode radio link control entity between a transmitting side and a receiving side (see col. 12, lines 5-15);

setting means for setting a retransmission parameter so that the packet data units are not retransmitted to said first base station when receiving status reports for sent packet data units from said receiving side (see col. 9, lines 8-22);

buffering means for buffering transmitted packet data units in a retransmission buffer (see col. 12, lines 23-30);

receiving means for receiving the status reports for the sent packet data units from said receiving side (see col. 12, lines 47-61).

Nevo does not teach:

purging means for purging the packet data units from said retransmission buffer based on said received status reports;

scheduling means for scheduling remaining packet data units in said retransmission buffer for transmission to said second base station, and transmitting means for transmitting said scheduled remaining packet data units to said second base station.

Wei teaches:

Purging means for purging the packet data units from said retransmission buffer based on said received status reports (see col. 16, lines 39-45); and

Scheduling means for scheduling remaining packet data units in said retransmission buffer for transmission to said second base station, and transmitting means for transmitting said scheduled remaining packet data units to said second base station (see col. 16, lines 31-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Wei to said device of Nevo in order to better prevent loss of data due to long periods between retransmissions.

The combination of Nevo and Wei does not teach the handover between base stations comprising transmitting packet data units for unacknowledged mode services and purging from said retransmission buffer the packet data units for which positive or negative status reports have not been received.

Yi teaches the handover between base stations comprising transmitting packet data units for unacknowledged mode services (see col. 14, lines 21-31) and purging from said retransmission buffer the packet data units (see col. 4, lines 31-36 noting that the packet data units are the RLC PDUs) for which positive or negative status reports have not been received (see col. 4, lines 44-50 noting that only RLC PDUs with a status report are retransmitted). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Yi to the modified device of Nevo and Wei in order to better minimize data discrepancies during handover.

Referring to Claims 2, 6, and 10, Wei also teaches purging the packet data units that have been either negatively or positively acknowledged by said user terminal from said retransmission buffer (see col. 16, lines 39-45).

Referring to Claims 3, 7, and 11, Nevo also teaches setting a retransmission parameter that comprises a MaxDAT with an appropriate value (see col. 13, lines 58-67).

Referring to Claims 4, 8, and 12, Nevo also teaches transmitting the packet data in said mobile communication network, which is a high speed downlink packet access network (see col. 2, lines 42-47).

Response to Arguments

3. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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